## REMARKS

As a preliminary matter, Applicants traverse the outstanding Office Action as being nonresponsive. Although the outstanding Office Action does, in general, comment on some of the arguments traversing the previous rejection, these comments do not address all of the meritorious arguments that were presented. For example, with respect to the repeated rejection based on obviousness, the rejection still does not cite to one single teaching or suggestion within the prior art references themselves that affirmatively supports the desirability of making the actual combination proposed by the Examiner.

Furthermore, with respect to Applicants' rebuttal of the alleged *prima facie* case, no teaching or suggestion from the prior art has been cited to overcome the fact that the Benes reference (U.S. 4,817,430) in particular materially teaches away from the present invention. The mere statement by the Examiner, that Benes is only relied upon for teaching or suggesting other principles of the present invention, fails overcome this problem with the reference. Any reference that materially teaches away from the present invention cannot form the basis of an obviousness rejection. Accordingly, all of Applicants' previous arguments, and particularly those from Amendment F, filed March 14, 2006, are incorporated by reference herein. Applicants again respectfully request that the Examiner consider those arguments and withdraw the outstanding rejection.

Claims 1, 4-8, and 11-13 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Applicants' Admitted Prior Art ("the AAPA") in view of Horn ("Basic

Electronics Theory"), Benes, and Storch (U.S. 2,980,872). Applicants respectfully traverse this rejection for at least the reasons of record, those discussed above, and as follows. This rejection is identical to the previous rejection except for the new addition of the Storch reference. No teaching or suggestion has been cited from Storch, however, to overcome the clear deficiencies presented by the other references.

Section 2143.01 of the MPEP codifies the long-established principle of patent law that *prima facie* obviousness is not established merely by picking and choosing different elements of the claimed invention from various prior art references. And even if such various elements could be combined as proposed by the Examiner, obviousness is still not established by this mere fact, even if it is within the capability of one skilled in the art to make such a combination. Section 2143.01 expressly requires that an asserted *prima facie* case of obviousness must additionally demonstrate where the references themselves affirmatively teach or suggest the desirability of making the combination proposed by the Examiner. In the present case, however, this requirement still has not been met.

Applicants acknowledge that the Examiner has presented several rationales and theories for why he believes the cited references can be combined. As previously pointed out to the Examiner though, the Examiner's own personal theories in favor of the proposed combination do not satisfy the requirements of Section 2143.01. The required teaching or suggestion for the desirability of making the proposed combination must come from the references themselves, or else based on well known principles entered in

the record by affirmative evidence that is capable of objective review and rebuttal. See In re Lee, 277 F.3d 1338, 61 U.S.P.Q.2d 1430 (Fed. Cir. 2002). The explanations put forth by the Examiner, however, do not cite to any specific teachings or suggestions from the prior art of record for support, and no other evidence to support the Examiner's opinioni has been entered of record. Accordingly, for at least these reasons, the outstanding obviousness rejection is deficient on its face, and must be withdrawn.

It is also important to note, with respect to the Examiner's stated reasons for justifying the proposed combination, how often these reasons refer to "common sense" as the only justification. The United States Court of Appeals for the Federal Circuit has expressly rejected the assertion of "common sense" as the justification for combining one reference with another. See Lee at 1344. The references themselves must affirmatively teach or suggest the desirability for the combination, or obviousness cannot be established or maintained. Accordingly, the rejection is further deficient for at least these reasons as well, and must be withdrawn.

The nonobviousness of the proposed combination is even more apparent when considered in light of the new Storch reference. The Examiner correctly acknowledges that none of the other cited references teach or suggest anything regarding the use of AT-cut crystals, or their equivalents. The rejection relies only upon Storch, not only for teaching the use of AT-cut crystals, but also for the additional proposition that it would be obvious to utilize such crystals as claimed in the present invention. There is no affirmative teaching or suggestion within the Storch reference, however, for making the

proposed combination, because Storch simply does not teach or suggest to utilize AT-cut crystals as specifically claimed in the present invention.

Applicants further note for the record that the Examiner's reliance on Storch is nothing more than a cursory statement that the reference teaches the use of AT-cut crystals. Claim 1 of the present invention, however, does not merely claim "the use of an AT-cut crystal." Instead, claim 1 specifically recites that the <u>output sine wave from the claimed crystal oscillator is passed through a crystal filter equal to an AT-cut crystal piece in cutting angle.</u> Storch fails to teach or suggest that any such signal, as presently claimed, is passed through its disclosed AT-cut crystals. Figs. 3 and 4 of Storch both clearly illustrate that the signal that is directly input into the disclosed crystals (1-3 in parallel, or 4-7 in parallel) is the output from the voltage source 8, which is not a crystal oscillator.

As discussed above, obviousness cannot be established by the mere picking and choosing of different elements from various prior art references. The prior art must affirmatively teach or suggest not only the various claimed elements, but also the <u>claimed relationships</u> between these various elements. The Storch reference teaches nothing more than the fact that AT-cut crystals are known in the art. The reference says nothing about passing the specifically claimed signal through such AT-cut crystals. The Examiner's reliance on Storch therefore, clearly demonstrates an impermissible use of hindsight, because there is no teaching or suggestion within the Storch reference to utilize its crystals as claimed by the present invention. Accordingly, for at least these additional

reasons, the asserted *prima facie* case of obviousness is further deficient, and must be withdrawn.

The rejection should still further be withdrawn because the Examiner has still not sufficiently answered the arguments put forth by Applicant traversing the alleged prima facie case of obviousness. As previously argued, because the Benes reference in particular teaches away from the present invention and it's material aspects, Benes cannot form the basis of an obviousness rejection, in whole or in part. The Examiner's repeated discussion about how band pass filters can "filter out harmonics" is irrelevant to the present invention as claimed. None of the pending claims of the present invention recite "the filtering out of harmonics." Instead, the present claims are affirmatively drawn toward a synchronous signal generator that includes a crystal oscillator which outputs a signal into a crystal filter, where the frequency of the crystal filter and the center frequency of the crystal oscillator are equal. Benes expressly teaches away from these plainly recited features of the present invention.

As repeatedly pointed out to the Examiner, the frequency of Benes' filters are significantly different and greater than the frequencies of its crystal oscillator. In other words, Benes directly teaches away from making these frequencies equal, as in the present invention. The Examiner's personal opinion that this undisputed fact is "inconsequential" to the rejection fails to answer the arguments traversing the rejection on rebuttal. As described above, the Examiner must be able to demonstrate where the

prior art teaches or suggests how this material contradiction between the references is inconsequential, or withdraw the rejection.

The Examiner's additional assertion, that he may still rely on Benes because the equal frequencies featured in the present invention can be shown in a different reference, also fails to answer Applicants' arguments. Even if another reference teaches one element of the present invention, the Examiner still is required to demonstrate, by objective evidence, that this other reference can and should be combined with Benes. In the present case, however, this requirement has not been, and cannot be, met.

Benes specifically requires filters having different frequencies than a crystal oscillator. No teaching or suggestion has been cited that Benes' required frequencies can, or should, be altered to match that of the crystal oscillator. Benes' broad teaching of "filtering out harmonics" fails to justify the obviousness of setting the filter frequencies to any frequency the Examiner can imagine. At most, the Examiner has only asserted that the references could be combined. The Examiner is still required to demonstrate where the references teach that they should be combined. Applicants again submit though, that Benes cannot be combined with the other references, as proposed by the Examiner, because it clearly teaches away from the other cited systems. Accordingly, for at least these reasons, Applicants again submit that even a prima facie case of obviousness has been sufficiently overcome on rebuttal.

Applicants' other arguments rebutting the outstanding rejection, namely, how the present invention is drawn to a significantly different system and apparatus than Benes, and several of the other references as well. Applicants have demonstrated how the present invention solves a different problem and achieves different results than many of the prior art references, and also how these results are advantageous over all of the prior art references of record. Because all of these arguments remain unchallenged on the record,

Applicants also note for the record that the Examiner has not challenged

Applicants further submit that even a prima facie case of obviousness has still further

been overcome on rebuttal. The Examiner is required to take into account all of these

other factors when considering the obviousness of combining references, and maintaining

a rejection based on such a combination.

For all of the foregoing reasons, Applicants submit that this Application,

including claims 1-13, is in condition for allowance, which is again respectfully

requested. The Examiner is invited to contact the undersigned attorney if yet another

interview would expedite prosecution.

Respectfully submitted,

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